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10/805,059	03/19/2004	Richard G. Boyatt III	2003-0755.02	7993
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LEXMARK INTERNATIONAL, INC. INTELLECTUAL PROPERTY LAW DEPARTMENT 740 WEST NEW CIRCLE ROAD BLDG. 082-1 LEXINGTON, KY 40550-0999			MARTINEZ, CARLOS A	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,059

Applicant(s)

BOYATT ET AL.

Examiner

Carlos A. Martinez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10, 11, 13 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 7-9, 12, 14, 15 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/19/04 & 5/5/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claims 18, 19, and 20 are objected to because of the following informalities: "The apparatus" is an improper reference to claim 17 [note: change to "The collimation assembly"]. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389).

- Naoe teaches that collimation with respect to multi-beams (refer to lines 20-29 of column 2). Further, Naoe teaches that at least two adjustment brackets (refer to elements identified by 201 in Fig. 2) supported on said collimation housing (refer to lines 56-67 of column 5 and lines 1-6 of column 6); a light source (refer to elements identified by 203 in Fig. 2) supported by each of said adjustment brackets, each said light source defining a respective light beam axis (refer to element 211; lines 61-65 of column 5; and lines 3-6 of column 6); at least two collimation lenses (refer to elements identified by 208 in Fig. 2), each collimation lens supported in said

collimation housing and intersected by one of said light beam axes (refer to element 211; lines 63-67 of column 5; and lines 1-12 of column 6); and each of said adjustment brackets (refer to elements identified by 201 in Fig. 2) being movable relative to said collimation housing to locate each of said light beam axes at a predetermined position relative to a respective collimation lens (refer to lines 56-67 of column 5 and lines 1-6 of column 6).

- However, Naoe fails to specifically mention including a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to said scanning element, where the collimation assembly has: a collimation housing mounted to said printhead housing.
- Cannon teaches a collimation assembly (refer to elements 27a and 27b; line 1 of abstract) including a printhead housing (refer to element 56 and paragraph [0043]) and having a scanning element for scanning a light beam (refer to element 36) and a pre-scan assembly for transmitting a received light beam to said scanning element (refer to abstract), where the collimation assembly has: a collimation housing (refer to elements 30a and 30b) mounted to said printhead housing (refer to paragraphs [0006] and [0038]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe, including a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to said scanning element, where the collimation assembly has: a collimation housing mounted to said printhead

housing, as taught by Cannon, for the purpose of providing a holding structure for collimation using commonly utilized multi-beamed scanners and for providing a means to hold light sources and collimation lenses for use with such light sources – which can be adjusted/aligned to such collimation lenses.

With respect to claim 2, Naoe teaches where the adjustment bracket is movable relative to the collimation housing along two axes of movement transverse to the light beam axes (refer to lines 56-67 of column 5 and lines 1-6 of column 6).

- Cannon fails to specifically mention where the adjustment bracket is movable relative to the collimation housing along two axes of movement transverse to the light beam axes.
- However, Naoe teaches where the adjustment bracket is movable relative to the collimation housing along two axes of movement transverse to the light beam axes (refer to lines 56-67 of column 5 and lines 1-6 of column 6).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Cannon, so that the adjustment bracket is movable relative to the collimation housing along two axes of movement transverse to the light beam axes, as taught by Naoe, for the purpose of providing adjustment/alignment of each laser source with respect to an associated collimator lens.

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With respect to claim 5, Cannon teaches where a light source is supported for movement in a process direction parallel to the light beam axes to adjust the distance between the light source and the collimation lens.

- Naoe fails to specifically mention where a light source is supported for movement in a process direction parallel to the light beam axes to adjust the distance between the light source and the collimation lens.
- However, Cannon teaches where a light source is supported for movement in a process direction parallel to the light beam axes to adjust the distance between the light source and the collimation lens (refer to paragraphs [0016] and [0015]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe, where a light source is supported for movement in a process direction parallel to the light beam axes to adjust the distance between the light source and the collimation lens, as taught by Cannon, for the purpose of providing adjustment/alignment of each laser source with respect to an associated collimator lens.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389), as applied to claim 2 above, and further in view of Naiki (US5969843).

- Naoe (in view of Cannon) teaches adjustment brackets and holes that are defined through each adjustment bracket to the collimation housing; however, Naoe (in view of Cannon) fails to specifically mention where the fasteners extend through the holes

to attach the adjustment brackets to the collimation housing with the holes comprising oversized holes for accommodating adjustment of the adjustment brackets relative to the collimation housing.

- However, Naiki teaches where fasteners (refer to element 45) extend through the holes to attach the adjustment brackets to the collimation housing (refer to element 31) with the holes comprising oversized holes for accommodating adjustment of the adjustment brackets relative to the collimation housing (refer to Fig. 7 and Fig. 8; also lines 39-52 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon), where the fasteners extend through the holes to attach the adjustment brackets to the collimation housing with the holes comprising oversized holes for accommodating adjustment of the adjustment brackets relative to the collimation housing, as taught by Naiki, for the purpose of providing a range of clearance between the screws and their mounting holes for movable adjustment of the light source.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389), as applied to claim 1 above, and further in view of Kasai (US20040223203).

- Naoe (in view of Cannon) teaches a circuit board mounted to the printhead housing (refer to elements 28a and 28b); however, Naoe (in view of Cannon) fails to

specifically mention flexible circuit leads extending from the circuit board, the light sources including lead wires connected to the flexible circuit leads for powering the light sources.

- However, Kasai teaches flexible circuit leads (refer to element 15) extending from the circuit board (refer to element 10), the light sources including lead wires connected to the flexible circuit leads for powering the light sources (refer to paragraph [0046]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon), where the flexible circuit leads extending from the circuit board, the light sources including lead wires connected to the flexible circuit leads for powering the light sources, as taught by Kasai, for the purpose of allowing the laser diodes to be movable relative to a fixed circuit board.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389), as applied to claim 5 above, and further in view of Takashima (US5633761).

- Naoe (in view of Cannon) teaches adjustment brackets; however, Naoe (in view of Cannon) fails to specifically mention a generally tubular mount member receiving a light source in sliding relation for adjustment of the distance between the light source and a collimation lens.

- However, Takashima teaches a generally tubular mount member (refer to inner wall which holds the diode/light source) receiving a light source (refer to element 42) in sliding relation for adjustment of the distance between the light source and a collimation lens (refer to lines 13-24 of column 6).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon), with a generally tubular mount member receiving a light source in sliding relation for adjustment of the distance between the light source and a collimation lens, as taught by Takashima, for the purpose of allowing proper alignment/positioning between light source and collimating lens.

5. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389) and Takashima (US5633761).

- Naoe teaches that collimation with respect to multi-beams (refer to lines 20-29 of column 2). Further, Naoe teaches that at least two adjustment brackets (refer to elements identified by 201 in Fig. 2) supported on said collimation housing (refer to lines 56-67 of column 5 and lines 1-6 of column 6); a light source (refer to elements identified by 203 in Fig. 2) supported by each of said adjustment brackets, each said light source defining a respective light beam axis (refer to element 211; lines 61-65 of column 5; and lines 3-6 of column 6); at least two collimation lenses (refer to elements identified by 208 in Fig. 2), each collimation lens supported in said collimation housing and intersected by one of said light beam axes (refer to element

211; lines 63-67 of column 5; and lines 1-12 of column 6); and each of said adjustment brackets (refer to elements identified by 201 in Fig. 2) being movable relative to said collimation housing to locate each of said light beam axes at a predetermined position relative to a respective collimation lens (refer to lines 56-67 of column 5 and lines 1-6 of column 6).

- However, Naoe fails to specifically mention a collimation assembly including a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to said scanning element, where the collimation assembly has: a collimation housing mounted to said printhead housing. Further, Naoe does not specifically teach a light source that is supported within each mount member where the light source is adjustable relative to a respective mount member in a direction parallel to said light beam axes.
 - Cannon teaches a collimation assembly (refer to elements 27a and 27b; line 1 of abstract) including a printhead housing (refer to element 56 and paragraph [0043]) and having a scanning element for scanning a light beam (refer to element 36) and a pre-scan assembly for transmitting a received light beam to said scanning element (refer to abstract), where the collimation assembly has: a collimation housing (refer to elements 30a and 30b) mounted to said printhead housing (refer to paragraphs [0006] and [0038]). However, Cannon does not specifically teach a light source that is supported within each mount member where the light source is adjustable relative to a respective mount member in a direction parallel to said light beam axes.
- Takashima teaches a light source (refer to element 42) that is supported within each

mount member (refer to element 70) where the light source is adjustable relative to a respective mount member in a direction parallel to said light beam axes (refer to lines 13-24 of column 6).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe, to include a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to said scanning element, where the collimation assembly has: a collimation housing mounted to said printhead housing, and a light source that is supported within each mount member where the light source is adjustable relative to a respective mount member in a direction parallel to said light beam axes, as taught by Cannon and Takashima, for the purpose of providing a holding structure for collimation using commonly utilized multi-beamed scanners, allowing proper alignment/positioning between light source and collimating lens, and for providing a means to hold light sources and collimation lenses for use with such light sources – which can be adjusted/aligned to such collimation lenses.

With respect to claim 16, Naoe discloses where the adjustment brackets are located adjacent to each other in a cross-scan direction (refer to the location of the elements identified by 201 in Fig. 2 along the y-axis – which corresponds to a cross-scan direction).

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6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389) and Takashima (US5633761), as applied to claim 10 above, and further in view of Kasai (US20040223203).

- Naoe (in view of Cannon and Takashima) teaches a circuit board mounted to the printhead housing (refer to elements 28a and 28b); however, Naoe (in view of Cannon and Takashima) fails to specifically mention flexible circuit leads extending from the circuit board, the light sources including lead wires connected to the flexible circuit leads for powering the light sources.
- However, Kasai teaches flexible circuit leads (refer to element 15) extending from the circuit board (refer to element 10), the light sources including lead wires connected to the flexible circuit leads for powering the light sources (refer to paragraph [0046]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon and Takashima), where the flexible circuit leads extending from the circuit board, the light sources including lead wires connected to the flexible circuit leads for powering the light sources, as taught by Kasai, for the purpose of allowing the laser diodes to be movable relative to a fixed circuit board.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389) and Takashima (US5633761), as applied to claim 10 above, and further in view of Naiki (US5969843).

- Naoe (in view of Cannon and Takashima) teaches adjustment brackets and holes that are defined through each adjustment bracket to the collimation housing; however, Naoe (in view of Cannon and Takashima) fails to specifically mention where the fasteners extend through the holes to attach the adjustment brackets to the collimation housing with the holes comprising oversized holes for accommodating adjustment – along two axes of movement transverse to the light beam axes – of the adjustment brackets relative to the collimation housing.
- However, Naiki teaches where fasteners (refer to element 45) extend through the holes to attach the adjustment brackets to the collimation housing (refer to element 31) with the holes comprising oversized holes for accommodating adjustment – along two axes of movement transverse to the light beam axes – of the adjustment brackets relative to the collimation housing (refer to Fig. 7 and Fig. 8; also lines 39-52 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon and Takashima), where the fasteners extend through the holes to attach the adjustment brackets to the collimation housing with the holes comprising oversized holes for accommodating adjustment of the adjustment brackets relative to the collimation housing, as taught by Naiki, for the purpose of providing a range of clearance between the screws and their mounting holes for movable adjustment of the light source.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389) and JP2004034608.

- Naoe teaches that collimation with respect to multi-beams (refer to lines 20-29 of column 2). Further, Naoe teaches that at least two adjustment brackets (refer to elements identified by 201 in Fig. 2) supported on said collimation housing (refer to lines 56-67 of column 5 and lines 1-6 of column 6) and located adjacent to each other in a cross-scan direction (refer to the location of the elements identified by 201 in Fig. 2 along the y-axis – which corresponds to a cross-scan direction); a light source (refer to elements identified by 203 in Fig. 2) supported by each of said adjustment brackets, each said light source defining a respective light beam axis (refer to element 211; lines 61-65 of column 5; and lines 3-6 of column 6); at least two collimation lenses (refer to elements identified by 208 in Fig. 2), each collimation lens supported in said collimation housing and intersected by one of said light beam axes (refer to element 211; lines 63-67 of column 5; and lines 1-12 of column 6); and each of said adjustment brackets (refer to elements identified by 201 in Fig. 2) being movable relative to said collimation housing in a scan direction and in the cross-scan direction to locate each of said light beam axes at a predetermined position relative to a respective collimation lens (refer to lines 56-67 of column 5 and lines 1-6 of column 6).
- However, Naoe fails to specifically mention a collimation assembly including a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to said scanning element,

where the collimation assembly has: a collimation housing mounted to said printhead housing. Further, Naoe does not specifically teach a mounting member.

- Cannon teaches a collimation assembly (refer to elements 27a and 27b; line 1 of abstract) including a printhead housing (refer to element 56 and paragraph [0043]) and having a scanning element for scanning a light beam (refer to element 36) and a pre-scan assembly for transmitting a received light beam to said scanning element (refer to abstract), where the collimation assembly has: a collimation housing (refer to elements 30a and 30b) mounted to said printhead housing (refer to paragraphs [0006] and [0038]). However, Cannon does not specifically teach a mounting member. JP2004034608 teaches a mounting member (refer to element 4 and abstract).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe, to include a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to said scanning element, where the collimation assembly has: a collimation housing mounted to the printhead housing, and a mounting member, as taught by Cannon and JP2004034608, for the purpose of providing a holding structure for collimation using commonly utilized multi-beamed scanners, allowing proper alignment/positioning between light source and collimating lens, and for providing a means to hold light sources and collimation lenses for use with such light sources – which can be adjusted/aligned to such collimation lenses.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389) and JP2004034608, as applied to claim 17 above, and further in view of Kasai (US20040223203).

- Naoe (in view of Cannon and JP2004034608) teaches a circuit board mounted to the printhead housing (refer to elements 28a and 28b); however, Naoe (in view of Cannon and JP2004034608) fails to specifically mention flexible circuit leads extending from the circuit board, the light sources including lead wires connected to the flexible circuit leads for powering the light sources.
- However, Kasai teaches flexible circuit leads (refer to element 15) extending from the circuit board (refer to element 10), the light sources including lead wires connected to the flexible circuit leads for powering the light sources (refer to paragraph [0046]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon and JP2004034608), where the flexible circuit leads extending from the circuit board, the light sources including lead wires connected to the flexible circuit leads for powering the light sources, as taught by Kasai, for the purpose of allowing the laser diodes to be movable relative to a fixed circuit board.

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10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoe (US6343092) in view of Cannon (US20040047389) and JP2004034608, as applied to claim 17 above, and further in view of Takashima (US5633761).

- Naoe (in view of Cannon and JP2004034608) fails to specifically disclose where the light source is adjustable relative to a respective mount member in a direction parallel to said light beam axes.
- However, Takashima discloses where the light source (refer to element 42) is adjustable relative to a respective mount member (refer to element 70) in a direction parallel to said light beam axes (refer to lines 13-24 of column 6).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify a collimation assembly, as taught by Naoe (in view of Cannon and JP2004034608), so that the light source is adjustable relative to a respective mount member in a direction parallel to said light beam axes, as taught by Takashima, for the purpose of allowing proper alignment/positioning between light source and collimating lens.

Allowable Subject Matter

Claims 7-9, 12, 14, 15, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: Claims 7-9 are allowable over the art of record because the prior art does not teach a collimation assembly for a multi-beamed scanner including a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to the scanning element, where the collimating assembly has: a collimation housing mounted to the printhead housing; at least two adjustment brackets supported on the collimation housing; a light source supported by each of the adjustment brackets, each the light source defining a respective light beam axis; at least two collimation lenses, each collimation lens supported in the collimation housing and intersected by one of the light beam axes; each of the adjustment brackets being movable relative to the collimation housing to locate each of the light beam axes at a predetermined position relative to a respective collimation lens; where each light source is supported for movement in a process direction parallel to the light beam axes to adjust the distance between the light source and the collimation lens; where the adjustment bracket includes a generally tubular mount member receiving the light source in sliding relation for adjustment of the distance between the light source and the collimation lens; a plurality of ribs extending within the mount members for engaging the light source and providing a clearance space between an exterior of the light source and an inner wall of the mount member; where the mount member includes a slot portion extending the length of the mount member, the slot portions of the mount members being located in facing relationship to each other; and where the mount members each define an outer diameter and the distance between the light axes is less than the outer diameter of the mount members.

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The following is a statement of reasons for the indication of allowable subject matter: Claims 12, 14, and 15 are allowable over the art of record because the prior art does not teach a collimation assembly for a multi-beamed scanner including a printhead housing and having a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to the scanning element, the collimation assembly comprising: a collimation housing mounted to the printhead housing; at least two adjustment brackets supported on the collimation housing, each the adjustment bracket including a mount member; a light source supported within each the mount member, each the light source defining a respective light beam axis, and each the light source being adjustable relative to a respective mount member in a direction parallel to the light beam axes; at least two collimation lenses, each the collimation lens supported in the collimation housing and intersected by one of the light beam axes; each of the adjustment brackets being movable relative to the collimation housing to locate each of the light beam axes at a predetermined position relative to a respective collimation lens; where the mount members each define an outer diameter and the distance between the light axes is less the outer diameter of the mount members; where each adjustment bracket includes mounting holes and a fastener through each of the mounting holes for mounting the adjustment brackets to the collimation housing, the mounting holes comprising oversized holes for accommodating adjustment of the adjustment brackets along two axes of movement transverse to the light beam axes; where the mount members each define an outer diameter and the distance between the light axes is less than the outer diameter of the mount members; and where each mount member includes a slot portion extending the length of the mount member, the slot portions of the mount members being located in facing relationship to each other.

The following is a statement of reasons for the indication of allowable subject matter: Claim 20 is allowable over the art of record because the prior art does not teach a collimation assembly in a multi-beamed scanner that includes a printhead housing and a scanning element for scanning a light beam and a pre-scan assembly for transmitting a received light beam to the scanning element, a collimation assembly comprising: a collimation housing mounted to the printhead housing; at least two adjustment brackets supported on the collimation housing and located adjacent to each other in a cross-scan direction, each the adjustment bracket including a mount member; a light source supported within each the mount member, each the light source defining a respective light beam axis; at least two collimation lenses, each the collimation lens supported in the collimation housing and intersected by one of the light beam axes; each of the adjustment brackets being movable relative to the collimation housing in a scan direction and in the cross-scan direction to locate each of the light beam axes at predetermined positions relative to a respective collimation lens; and where the mount members each define an outer diameter and the distance between the light axes is less than the outer diameter of the mount members.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Martinez whose telephone number is (571) 272-8349. The examiner can normally be reached on 8:30 am - 5:00 pm (M-F).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAM
05/04/2006


HAI PHAM
PRIMARY EXAMINER